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American Iris Society

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Dedicated to the Memory of
Arthur Hoyt Scott

R. S. STURTEVANT, Editor
Groton, Mass.

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Arthur H. Scott

THE AMERICAN IRIS SOCIETY

ARTHUR HOYT SCOTT

Arthur Hoyt Scott died at the University Hospital, Philadelphia, on Saturday, February 26, 1927. He had been very ill a year ago but had gained strength last summer and had seemed to be on the road to recovery. He tired easily, however, from any exertion and after a relapse in January he was taken to the hospital. Here he again rallied well and due to his wonderful courage continued to gain until just a few days before his death. During his long illness he kept in close touch with the affairs of the society which were handled at his office and even at the hospital continued his interest in its work.

Mr. Scott was born in Camden, N. J., 52 years ago. He was a graduate of Swarthmore College, class of 1895. He was a charter member of the Swarthmore chapter of the Delta Upsilon fraternity.

After graduation he entered the Scott Paper Company in Philadelphia which was then headed by his father. He traveled extensively for the company and in 1906 built the first factory of the company in Philadelphia. With the rapid development of the business he soon realized the need of a larger factory and in 1909 started the Chester plant, a plant containing what is said to be the largest paper-making machinery in the world. He became president of the company on the retirement of his father in 1920.

About 1920 he moved from Philadelphia to Rose Valley near Media and Chester where he soon became a member of the Borough Council and was most active in all community affairs.

He is survived by his wife, his daughter, Mrs. P. Exton Guckes, his father, Mr. E. Irwin Scott, and his sister, Mrs. Owen Moon.

IN MEMORIAM

The American Iris Society has suffered another great loss in the death of its Treasurer, Arthur H. Scott. He was one of the organizers of the Society, and although not an officer in its early years was often appealed to for help and advice. He was never ambitious to hold office but when we turned to him after Mr. Presby's death in November, 1924, he consented not only to become treasurer but to have his office take over the work of storing and mailing the Bulletins. He made a special effort to increase our membership and the increases in 1925 and 1926 were largely a result of his efforts in this direction.

Always a keen gardener, his special interests were peonies, irises and lilacs. When I first met him through the kindly offices of Mr. Farr over 15 years ago, he lived in Oak Lane, a Philadelphia suburb, and had not more than an acre or two of ground. It was crowded with beautful plants and it was there that I saw for the first time the best of the modern peonies. Generous to a fault, neither Mr. nor Mrs. Scott ever allowed a visitor to go away empty-handed and their beautiful flowers must have found their way into hundreds of homes.

When he moved to the Rose Valley Farm he had to leave behind splendid specimens of named lilacs and other flowering shrubs, but the herbaceous plants were taken along to start the new garden on a rather barren hillside. Within a few years this had been transformed into a most charming terraced garden where the rare and lovely flowers were framed by walls of flowering shrubs.

With additional space at his command he began to grow iris and peony seedlings and during the past few years must have had an acre or so of them under trial. One of the wonders of the countryside was a solid bed of Japanese iris about 100 feet square that was the result of one pound of seed purchased in Japan. I have never seen finer, healthier plants and the height, size and range of color seemed fully equal to that of the best named varieties.

He exhibited seedling Iris at the first A. I. S. show in 1920 and won two of the first three H. M.'s given by the Society. The winner of one of these was named Steepway and introduced in 1922. Further trial convinced him that the other variety had not deserved the award and the plants were destroyed. His modesty prevented his introducing many peony and iris seedlings which were of high

quality, and year by year he rigidly selected and rejected. Some which had been saved and propagated may yet find their way into our gardens.

There was scarcely a day in the spring months when visitors did not flock to his garden. Daffodils, tulips, lilacs, iris, peonies and roses followed one another in quick succession. One of the things he did not live to complete was a wild garden, but the arbutus which had been almost exterminated before he came there had, under his protection, commenced to increase rapidly.

Always when I went to see him I was invited to stay for a meal or over night and often I have been his guest on trips. I remember driving to Wyomissing to see the lilacs, to Little Falls to see Mr. Hunt's daffodils, and in 1924 to Washington to the Iris Show and annual meeting, and many other shorter trips. Everywhere he went he inspired people with the love of flowers.

John C. Wister

ROSE VALLEY

R. S. Sturtevant

A well remembered day is that when I first saw the new garden that Mr. Scott was painting on the gently rolling slopes beyond the town of Media, Pennsylvania. As we turned off the main road into a country lane a young orchard filled the air with the fragrance of its first bloom and then on leaving the car in front of the old barn we walked out between the heavy piers of rough field stone. The broad drive stretched straight ahead with its vista of meadow and grove; to the right was a planted wall, a sweep of lawn, and the old stone farm house shadowed by its trees, while to the left one looked down a series of garden terraces to the fields beyond and the patchwork of vegetable garden and propagating bed.

It was too early for a sweep of irises but by the terrace wall were graceful mounds of pale yellow Hugonis roses and budded spires of irises that promised much and in the garden were full-blown lilacs and great masses of tree peonies in every tone of rose and crimson. Along the grass paths were groups of bleeding heart and columbines, gray sworded irises, and great mats of scented pinks, but though the display was in these lower gardens the real delight was toward the house with its broad path marked with great box

bushes. The steps were of the same stone as the house and between the rough flags thyme and sedum were already becoming great, while here and there Edelweiss and rarer alpines intrigued the interest. It was amazing that so new a garden should carry so strong an effect of peace and long continued serenity and yet to those who have known Mr. and Mrs. Scott their garden became but the natural setting for their hospitality.

Within the house there was the same charm of permanence and rest; the studied placing of an old chair, the seemingly casual use of old pottery all revealed an unusual appreciation not only of beauty but of beauty as an adjunct of comfort and true living.

From such peace Mr. Scott drove us down to Washington through the mists of a rainy day. Trees would take shape as we approached and the gray became the blue-lavender spikes of Paulownia or the still tender green of an aspen. It was a long drive and a hard one on the driver and yet a most pleasant memory, as I seem to hear again the quiet tales of Brandywine or the old towpath by the canal.

It was not until this last summer that I again had the pleasure of seeing the now older garden. It had grown as gardens will and below th eterraces was a great sweep of Japanese irises, white and lavender and purple, breast high as we threaded our way among them. The garden proper seemed just a summer phase of the spring garden I had seen before but the lawn had spread and won new boundaries, while beyond the house a new wall was already taking on a look of always-there with its clematis and clambering roses. As we sat in the cool darkness of the house there was talk of new plans for new gardens, talk of the sweeps of narcissus that had first bloomed at the lawn edge, talk of the woods taming where may-flowers and trillium were coming back to their pristine beauty. And with all this talk of the future, with all the discussion of what could be done for the Iris Society, there was not a hint that we were talking with a man that had been seriously ill for many months, with a man who had had to give up his daily tasks and must now count each passing hour. The Iris Society has lost an ever-interested, forward-looking treasurer, but his friends have lost a man of quiet courage, one whose mere presence seemed to banish all thoughts of weariness and worry. I am deeply glad that I have known him.

The Steps at Rose Valley.

THE FUTURE OF IRIS BREEDING

Sydney B. Mitchell

I have recently advised a friend of mine who is a strictly commercial grower to devote little of his time and attention to the breeding of bearded irises. Lest it be assumed from this that I doubt the progress which is still possible, let me say right here that it was not on this account that I so advised him. It is perfectly true that it is now much harder to get fine distinctive seedlings, for the easier things have already been achieved, and the number of breeders has greatly increased in recent years. Except by chance, I do not look for great advances from those who are merely gathering together a good collection of named varieties and crossing them in the hope that something will turn up. This is the process which naturally results in the production in many places of very similar varieties, and, because of the large use of Dominion and its derivatives, this obtaining of very good similar seedlings is likely to be particularly evident in the early future. I know of at least two breeders of long experience who are avoiding the use of Dominion and its progeny, excepting where they can mate them with pedigreed seedlings of their own which differ from anything yet in commerce. Unquestionably the way of success in getting really distinctive seedlings lies in the long and arduous method of developing your own pedigreed stock, working towards definite aims, and keeping such accurate records that when unexpectedly happy results are reached, you can see how they came about from these records and take every advantage of what you have learned in continuing your work. Sometimes, as I have suggested, progress will occur in unexpected ways. For example, after crossing whites with yellows in an attempt to get larger yellows, where the factors for albinism would coincide with those for yellow, I found that the yellows were nearly always very pale. Such crosses have given some very attractive cream-colored flowers, but as one of the parents, the yellow one, must be relatively small, it has been hard to get even pale yellows of large size through such crosses, even where the white parents were as big as Argentina or its still bigger seedling. On the other hand, a wholly different series of crosses with a different aim is apparently going to give me the key to getting large self yellows in quantity, though until more of the seedlings of these crosses have flowered I do not care to publish as general, results which have as

yet only appeared in a few cases. Other breeders, fortunately equipped with a better scientific background than mine, are doubtless learning even more as a result of experiment and observation. From them we shall doubtless get in the future as distinct advances in their particular specialties as are the new type plicatas being introduced this year, which are the result of a series of crosses definitely planned by the late William Mohr and myself, though he unhappily did not live to see the fruition. The aim was to introduce into the comparatively small, unbranched, and narrow-petalled plicatas some of the size, height, branching habit, and improved shape of flower characteristic of mesopotamica, while reducing its proportion of the parentage so greatly as to ensure reasonable hardiness in climates of long and uncertain winters. I was so sure of the likelihood of getting what we wanted that two weeks before they began to bloom for the first time I wrote to a fellow-breeder and told him that we expected the big plicatas in a couple of weeks. They came just as scheduled. With the experience of how to get plicatas one naturally next wants not only the qualities that I have already mentioned but if possible yellow ground plicatas with red-purple frillings. Mr. Bliss has long been after these, and will probably get them before some of us latecomers into the breeding field are successful, but such an attempt on our part naturally follows on the previous achievement.

I have mentioned these specific efforts and their measure of success as an indication of my faith in the possibilities of improvements, so that doubt on that score is not the reason for my advice to the professional grower to keep out of breeding. It is that the thought and time and even money consumed cannot be repaid by the financial returns. To get results there must be long consideration of desirable matings; many attempts, some unsuccessful, to achieve them; careful records to keep; seed to gather, label, and sow in such way that there will be no later failure of records; transplanting of seedlings and again careful labelling; then one or two years of cultivation and weeding before the first selection can be made. From hundreds of crosses with their separate records I flowered in 1923 about an even 3,000 seedlings. Of these only 2 per cent. were retained for further trial, which involved replanting after division, relabelling, and waiting two more years to be quite sure of characteristic bloom on them all again. From these, eight are to be introduced this year, and possibly two more next year, the total of ten being just one-third of 1 per cent. of the original

3,000. Now, if the breeder was so fortunate as to have a market among nurserymen or commercial growers as he has in England, and could get a cash return for the whole stock of a particularly desirable variety, he might break even on his expenses, charging up his own labor pretty largely to the fun and satisfaction he got out of it. But the American nurseryman has never been noted for his enterprise in such directions, so the breeder is only left the alternatives of going into business himself to distribute his seedlings (and this I know is distasteful to several of us, who have tried it) or he can get a professional grower, usually a specialist, to market his new varieties for a commission of 50 per cent. of the list price. But the selling of plants is very different from the selling of books, as I know from experience with both. For practically as many years as my "Gardening in California" will have a sale I shall derive a regular income from its royalties. With my irises it will be very different. Even my introducer will only pay me my share of the sales for a few years; in fact, he could not afford to do otherwise, the difficulty of course being that in every sale he makes he is providing a possible competitor with the opportunity to raise several plants in even one year from the one he has sold him. As these possible dealers of course pay no portion of their sales money to the originator, he is soon under a handicap. The author and the inventor, as is well known, have for a long time property rights in their products. As soon as a plant is distributed, its originator has none. Do not marvel, therefore, if the introductory prices of important advances or new types of flowers are high.

Can the breeder continue indefinitely to work on a large scale under these conditions? I doubt it very much. I know one California breeder who practically made no crosses last year, another one told me he was going to greatly curtail his activities, and I myself am quite satisfied in that my absence from California for a year at the University of Michigan will effectively prevent any crossing this season. Further, until the 250 successful matings I made last spring have shown me where I am going, I propose to practically discontinue on anything like my previous scale.

The breeder, moreover, is now meeting a further difficulty in a threatened boycott of his products by the large general commercial growers at least, and consequently by the many amateurs who buy chiefly from them. I do not blame the general nurseryman because he refuses to keep up with the procession of new seedlings. He is primarily a business man, not always very enterprising or sporting

one, whose preference is certainly for quantity production of standard varieties, whether it be of herbaceous plants or wooded ones. As his organization, both in field and sales work, is planned on this basis, it is probably better both for him and for such specialists as iris enthusiasts that he keep his list of iris to a quite small number, enough to interest the beginners and supply gardens where there is no special interest in or collection of irises. If he tries to have a large collection and gets large numbers of new introductions, among them are inevitably a good many which do not propagate well under his comparatively rough field culture, or else they demand conditions of drainage and protection which the amateur is cheerfully ready to give but which the general nurseryman cannot afford to furnish. Among them, too, will be some varieties on which he will never make a profit because at the present rate of improvement they may be too soon superseded. Again, it is hard for the large nurseryman, with his often considerable turnover of hired help, to avoid unintentional errors in filling orders made up of single rhizomes of many varieties. Personally, I should be pleased to see him stick to what he can do and what he finds profitable. Of course, as fine new varieties become recognized as superseding some that he offers, he will have to pay good prices for the large amount of stock needed for his business, and which he will not have because he preferred to take no chances in buying new introductions for his own propagation. A few nurserymen, of course, will continue their present practice of listing no new iris, however good, until it at least reaches its majority, and then they will offer it as a "Novelty," as one may still find in some catalogues the Goos and Koenemann seedlings of pre-war date. I suppose it is a good deal to ask the general nurseryman to definitely state his limitations rather than to leave the impression that of course his list contains the best of everything, and that the only reason that newer varieties are not offered is that after all they are not real improvements. If, as I understand, many nurserymen propose to add no novelties until they are thoroughly tried out, in all honesty they should make no comments on novelties which they have never seen.

What, then, is left as an outlet for the breeder who does not do his own selling? Obviously, only the iris specialist, who certainly deserves the support of the aspiring amateur, whose interest is in possible improvements and whose sporting blood induces him to try what is new while it is new, for the sake of the fun he gets out of it, not the money he puts into it. While I agree with Mr. Sturtevant

in deprecating the tendency of the wealthy amateur to try to make his hobby pay—they do this thing better in England, the country of real amateurs—I recognize the value of the local grower of small or moderate means who makes possible a fair sale for high priced novelties because he eventually gets his money back in large measure by selling to his neighbors. It is from this group that the specialty grower develops, and even when his business becomes national in character he retains a good deal of the amateur's attitude, not only in being cheerfully adventurous, willing and able to take occasional losses on duds, but sharing the amateur's attitude of willingness to provide special conditions for the exceptionally beautiful but exceptionally temperamental plant. To him also a large list of varieties is a matter of pride rather than a trouble, and he has no difficulty in correctly filling his orders as in most cases he either does the digging himself or it is done under his close direction. While the exceptional large grower, such as the late Mr. Farr, finally discards his dozens of superseded varieties, the specialist grower needs no pressure to make him do this, and as he has no great stock it is usually no serious financial loss. His interest in the particular flower is such that he welcomes improvement and is really pleased to get rid of old varieties which have been frankly superseded.

I trust that this rather long letter will be without offense to any. I have no intention of allotting merit to different classes of growers, but merely of making distinctions. In closing, let me say that I do not wish to discourage any amateur from raising seedlings for such fun as he gets out of it, but I deprecate his introductions unless he is willing to gather together a collection of the best and often most expensive new varieties for comparison, or to do such travelling in iris time as will enable him to see them in other gardens—either one a real matter of expense to the breeder. I deprecate equally, however, both the printed and more often spoken statements of professional growers that the "iris game is dead," just because they have lost interest, are not making money, or have not seen the real improvements which I in my visits to breeders all over this country have beheld. I have been growing irises for about twenty-five years, having imported my original collection from Barr and Perry when I was gardening in eastern Canada. Practically every variety of those days has been superseded in the gardens of the real enthusiast. I believe that the next twenty-five years will make quite as great a change from what he is growing to-day.

IS SCIENTIFIC RESEARCH NECESSARY TO THE AMERICAN IRIS SOCIETY?

A. E. Waller

Note. The Board of Directors has answered Mr. Waller's question in the affirmative. Under the new by-laws a Research Fund Membership has been outlined with the encouragement of scientific work as its chief aim. It would seem that the next step would be for the research fund members and the scientifically inclined members who in their professions are in touch with current experimentation should develop a means of contact and an interchange of information. This would not mean a permanent committee but rather a permanent Chairman to whom all information could be forwarded for distribution. Mr. A. E. Waller, Ohio State University, Columbus, Ohio, is now acting as Chairman. As the personnel of the group becomes known subchairmen might act for special sections of the work,—meetings in connection with those of the American Academy for the Advancement of Society might be planned for and slowly there would develop a well-organized body who would keep the lay members of the Iris Society in touch with developments of interest in the broader field of science. As a Society we can distribute periodical circulars to those interested and can initiate a plan of procedure but its actual development must depend upon the response of our individual members. The workers should communicate with Mr. Waller, the sponsors thereof will automatically join with their contribution to the Research Fund. —Ed.

Public notice was given some six months ago of the appointment of a "chairman of a scientific committee" in the American Iris Society following a proposal from the floor during the Cincinnati meeting. To date the committee has not been completed, in fact may never be actually complete, but a review of the situation and a possible program is presented here. Correspondence with a number of members and visits to the homes of two of the officers save the report from the stigma of a one-man job.

The correspondence, mostly in answer to a questionnaire,* brought together suggestions for a number of problems. In some cases after elaborating a problem, this formula was added. "But I'm too busy to devote the necessary time to it, what with this and that driving me almost frantic." This is not an unfamiliar story; it is highly probable that it is a true story. It is also an evil

* All persons replying to this questionnaire are herewith publicly and personally thanked for the time and thought they devoted to anwering. A. E. W.

story and the evil is already at the "embrace" stage if indeed we ever did shun it. No progress can be made, every one agrees, unless we can keep our minds on our problems.

If it be admitted that action is required to stimulate and correlate problem studies in iris, then it will be seen that two methods and only two can be utilized to obtain the knowledge we need. The one is through the long empirical methods of trial by commercial growers and garden lovers and the use and handing down of such methods by tradition. It is the method long revered as the trial and error method, or as brightly phrased by a modern psychologist "monkeying and success." The second method is through research.

The first method would be highly satisfactory to the individual content that his own garden represented very nearly the highest degree of excellence. He would not care to see another's garden or to hear of new varieties that he had not originated. Observations made might be haphazard and would seldom be systematically kept, and would run the risk of missing the important point. Such a person would probably not be a member of the Iris Society. But granted that the observation would be chronicled, a long time would elapse before good ideas would be circulated. As is sorrowfully recalled in "A Shropshire Lad," the Springs are all too few for iris as well as cherry blooms.

The research method would employ trained investigators to devote sustained effort to finding out the facts which underlie the growth and reproduction of iris. A correlated program of work would take up the most fundamental and far reaching phases of the problems requiring solution. Conclusive findings, not mere garden chat, would be the aim. The costs would be less than the collective costs of mistakes and pest troubles at present, and the circulation of knowledge based on good botanical experimental evidence would save time for everyone.

While members have shown by the enthusiasm in their correspondence and conversation that there seems to be little or no question as to the relative advantages of research over the trial and error method, some of the problems discussed should be examined before reaching a final conclusion.

1. *Is research necessary for taxonomy and geographic distribution?*

A good deal of work is still required in the classification of species of iris. The recent discovery of two new iris in the South

Eastern States suggests that the total number of American iris species is not yet known. The further study of the numerous forms and of their ranges and habitats is most important. A Western correspondent writes of his dissatisfaction with the present state of knowledge of the forms in the South Western region of the United States. The problem may be a local problem but it will eventually need to be presented in compilation.

2. *Is research necessary for physiological and ecological problems?*

Iris are advertised as easy to grow and yet they are admitted by every grower of experience as excellent tests of one's character—especially patience. All empirical accounts of treatment of cultures varies and contains contradictions. Has any one point on liming, fertilizers, or soils actually been settled?

What can we offer as to the best time for moving iris and not interrupt blooming the following year? Recent work on periodicity in light has brought forward an entirely new concept for the control of blooming in plants. The intensity and quality of light are also of known significance in bloom production. So far no direct experimentation on iris is available and all seasons of good or poor bloom are at present explained as due to vague or obscure causes.

In general nitrates are avoided as fertilizers for iris beds in spite of the fact that nitrogen is necessary for all plants. The problem of nitrates needs special investigation as it is known now that no fixed amount of nitrogen but a balance between the nitrogen and the carbohydrates reserves of the plant determine vegetative and blooming activity in plants. It is quite possible that the shy blooming varieties and poorly developed rhizomes reported from certain localities may be controlled through intelligent study of the nitrogen problems. Enough work has been done on other plants to offer a good approach to similar problems in iris.

Germination of seeds offers another fruitful field for endeavor. The wider ranges of success are reported. In some cases failures amount to twenty per cent of the entire seeding—a heartbreaking loss to the enthusiastic hybridist, and for the student of genetics it introduces too large a source of experimental error into the study of ratios. Only limited progress can be made in these fields until we can control germination. A start in one direction is being made by studying the substances in iris seeds microchemi-

cally. The first result of these studies is the discovery that part of the seed consists of hemicelluloses, reserve foods requiring digestion by slow processes before they are available to the embryo. The environment probably controls the germination process by furnishing the necessary conditions or unfavorable ones during storage and dormancy.

It is well known that the colors of flowers are capable of such wide variation as to produce entirely different garden effect from slight changes in acidity and alkalinity. The varieties differ in this respect. For some popular varieties an investigation conducted by controlling soil acidity would be the only means of removing the doubtful and conflicting statements. Other factors related to flower color would be light and humidity.

Investigations carried on in part through the support of the American Iris Society have been reported on sterility and it can be seen that there are avoidable and unavoidable cases of sterility, and that by the selection of suitable parents it is always possible to be certain of seed production. A recent investigation* of the failure to secure seeds from crossing *Iris pseudacorus* and *I. versicolor* showed that even though the pollen tubes reached the ovules, embryo and endosperm development did not continue to a stage where viable seeds could result.

No complete study in iris heredity can be made without a knowledge of the details of cytology to accompany the breeding operations. That this is of fundamental importance to a rational understanding of the heredity goes without saying.

3. *Is research in pathology necessary?*

Other problems with a decidedly practical bearing refer to the control of fungus, bacterial and insect pests, from the ravages of which no grower can count himself secure. That the pathology of iris is related to the other problems here outlined will be seen by recalling that epidemics are usually referred to certain climatic or soil conditions. In other words a thorough study of the environment of the parasites as well as the host would lead to the selection of such growing conditions as would favor the plants and be least favorable to the pests.

* Sawyer, M. Louise. 1925. Crossing *Iris pseudacorus* and *I. versicolor*. Botanical Gazette 79: 60–72.

4. *Aims*

Without dilating further on the problems that a brief survey of some of the more immediate gaps in our knowledge affords it will be seen that these investigations will require time, patient effort of skilled workers and money. It will also be seen that without investigations sooner or later, the society will be failing to develop along the lines by which all of our advancement in civilization has become available, namely by scientific research and its applications. The question before the Society is not one of whether or not research methods would yield valuable results, but it is a question of how best to proceed to obtain the necessary means for beginning a research program. If the Society wishes to continue as the protagonist of iris, this is a question which must be faced squarely.

FROM A LETTER TO MR. WISTER

I am very glad to be able to forecast the results of the replies to the questionnaires that I sent out. Most of the members, in spite of their busy lives, were willing to take time to answer some or all of the questions, or to write me letters. They are continuing to come in, two arriving since your letter of Nov. 21.

The first conclusion is that the members replying are interested in somebody carrying the work of iris appreciation into some scientific channels. I have not quoted these for lack of space.

There are several suggestions as to how it can be done. There is definite recognition of the caliber and amount of good research now going on and the attitude is that no committee could do anything with that in the way of improving it. That is a sane reaction and I would heartily endorse it. What could a committee add to work like Dr. Stout's or Dr. Small's or others?

But the real justification of a committee would be in meeting and talking over problems and having the Societies or special financial aid in attempting to solve some of them. It has been my experience in dealing with graduate students that much of the difficulty in research is understanding the problem. So far as I have been able to discover there has not been, previous to my attempt, any approach to iris investigations from the standpoint of comparisons of the various fields in which these problems lie. What

I should like is to be able to select certain persons or institutions and ask them to undertake research in one or more of the fields.

We have a good physiology laboratory at Ohio State and offer in addition some course work in plant microchemistry. I am asking one student who is taking this course to undertake the investigation of the substances in iris seeds. She will not be ready before Spring to begin on iris and that means that she will not find out much about them for another year, but I believe she will be here for several years.

I have started a garden from seeds this year dropping some fifteen thousand seeds of an assortment of varieties and species. This garden will furnish some germination tests, as all the seeds are counted, and some materials for genetic and physiological studies. It will also furnish some good evidence of the species capable of living out of doors in Ohio. I have also proposed to Mr. J. H. Gourley, head of the horticultural work at the Ohio Experiment Station, that they might undertake the questions of soil fertility, lime, and transplanting experiments. This may be acted upon favorably.

Without making any attempt to harmonize statements that may possibly conflict or to offer comments, I am quoting from several replies to my questionnaire and have them grouped under the headings already used.

Taxonomic questions

Edgar Anderson. Range of native species with exact data as to comparative prevalence.

S. S. Berry. I am keenly interested in the taxonomy of our native species, particularly the Southern and Western forms, with the present state of which in literature I am not at all satisfied. I have several forms in hand which I believe to be undescribed and upon which I hope to report at length later on.

B. Y. Morrison. I doubt if I can suggest any valuable point here, as I am not really a taxonomist. I object violently to splitting up species into many smaller ones of different definition.

J. Marion Shull. Iris taxonomy has been gone into so thoroughly by Dykes that there would seem to be little reward in this field at the present time. Undoubtedly *Iris versicolor, I. verna,* and *T. cristata,* natives of this region, do show some variation, especially the first named, but these slight variations do not appeal

to me as warranting any segregation into new species. Creation of new species by the mere splitting up of old is doubtful wisdom since any name is only for convenience and accuracy or reference, to prevent, not cause confusion.

Miss Sturtevant. I should like to know if Cypriana Ricardi, and Junonia are true species and if *I. prismatica* should be included in the Siberian group. Might not the study of pollen-grains help to separate species?

Physiological questions

Edgar Anderson. Comparative study of pollination methods.

S. S. Berry. I have much data on germination and pollination but lack time to work up any detailed report at present.

Paul H. Cook. The value of the old rhizome to the new growth.

M. A. Howe. Further studies on sterility and fertility in the best cultivated varieties.

J. S. Jackson. The lime idea is overdone. . . . Some dealers cut off the roots when shipping, a very poor practice based on the old idea that the roots die at once. Iris do not "rest" in summer, they keep growing.

J. W. Magruder. I believe I have made a valuable discovery connected with the germination of iris seed, it has worked wonderfully for the last two years for me but I do not wish to declare it until I have tried it out one more season . . . over ninety per cent of all the seed I planted last fall germinated.

J. C. Nicholls. Planting of Oct. 5, 1924—none came up Fall 1924. About 60% came up Spring 1925. About 15% Spring 1926.

Ecological questions

Paul H. Cook. Effect of the various times of transplanting on the next season's flowering.

P. H. Loomis. Best growth, flowers, increase this year with soil PH 7.5 no lime. Tentative feeling that lime retards growth.

W. E. Saunders. A snowless winter is always difficult for semi-tender things.

F. F. Williams. Very seldom freezes here and we have very long dry hot summers. I notice no particular climatic effect except perhaps earlier fading of the more delicate colors under our very brilliant sunshine. I grow the native plants in my garden from seeds, having had no success in moving native plants.

T. H. Morgan. (Note—there was no specifie section for genetics on the questionnaire.)

There should be some interesting questions here especially in regard to wild species. Seeds that I collected in the High Sierras have failed to germinate with or without freezing.

It would be well to have someone investigate the chromosome numbers and the reduction division of the wild and cultivated species. If money could be found to employ a student, under guidanee of a cytologist in a suitable place, I think the outeome might have not only a scientific interest but help to decipher the make-up of some of the cultivated hybrids.

Pathological and entomological questions

I have an outline of the insect pests from Mr. C. A. Weigel, of the U. S. Bureau of Entomology. A similar one of the plant pests would be desirable.

Formation of the Committee

G. M. Reed. I am somewhat in the dark as to what a committee can do and consequently find it difficult to make definite suggestions as to its formation. I doubt if Dr. Small and I could accomplish anything more by being joint members of a committee than we are doing now. On the other hand it might work out very well to have such a committee so that at least ideas could be interchanged. The usual scheme is for a committee to be more or less permanent. My own opinion is that if the committee is doing anything at all worthwhile it ought to undergo change in its membership.

I am personally acquainted with about a dozen members of the Society who might be classified as scientists. There are doubtless more. Would it not be a good idea to include on the committee iris enthusiasts who are in possession of a large quantity of this world's goods? If such members should be added for the purpose of supplying funds rather than advice, the work of the committee might be very successful. You will gather from my reply, of course, that I am not an enthusiast about extreme organization for the accomplishment of any such purpose as this. I shall of course be very glad to have further light on the whole problem and further the study of iris in any way I can.

A. E. Waller

A Garden Path at Rose Valley.

NEW YORK BOTANICAL GARDEN

Iris Test Garden Report

E. A. S. Peckham

The numbers of visitors during the season indicates that the planting was of distinct value to the public. The Alphabetical Garden was in splendid bloom although many plants were still, even after last year's checking, incorrectly placed. New beds for the later introductions will be planted in 1927.

Two hundred and fifty-one varieties were sent to the new Trial Garden at the Missouri Botanical Garden, twelve went to the Larchmont, N. Y., display garden, and twenty-four dwarf bearded varieties were sent to Prof. Wright at Cornell.

The Color Garden planted largely in 1925 did far better than we had expected and showed some bloom and very good growth indeed. Here also there were errors to be corrected and additions to be made. The 1927 display should be excellent.

Many additions to the Beardless irises and to Dr. Small's beds of native irises were made. The planting of variations of *Iris versicolor* collected throughout New England should prove of especial interest. Records of hardiness have been made but the results are not yet sufficiently conclusive for publication. Seeds of species were collected for exchange with other Botanical Gardens and the crop resulting from the sterility experiments of Messrs. Greene and Moore have been planted under the supervision of Dr. Edmund B. Southwick, who is in full charge of the rock-garden.

The list of donors is as follows:

Abbott, R. M.
Allison, Miss J. C.
Ayres, Dr. W. McL.

Barrows, Miss F. L.

Campbell, Frank W.
Cleveland, Mrs. F. E.
Collier, Mrs. John S.

Dept. of Geology, Northwestern University

Greene, A. H.

Hillcrest Gardens
Howe, Dr. Marshall A.

Jackson, H. S.
Jenison, N.
Jenkins, Elizabeth F.

Lane, Bernard H.
Lapham, E. G.

Movilla Gardens
McKinney, Mrs. Collin S.

Nichols, J. C.
North, Alice W.

Peckham, Mrs. Wheeler H.

Shull, J. Marion
Stuhlsatz, V. W.

Te-A-Wha Nursery
Tobie, Mrs. W. E.

Van Name, Miss Theodora

Wallace Co, R.
Weed's Landscape Nursery
Wister, John C.
Wyomissing Nursery Co.

IRISES THAT HAVE COME IN FOR DR. SMALL TO STUDY, SOME PURCHASED AND SOME DONATED

Florida	H. O'Neil	8
Arkansas	D. Demere	8
Florida	E. N. Reasoner	1
Miss.	Dr. Small	121
N. Orleans, La.	Dr. Small	343
Ala.	Dr. Small	18
Florida	Dr. Small	86
Vermont & Mass.	Dr. Small	84
Biltmore, N. C.	C. D. Beadle	13
Wilmington, N. C.	D. W. Gross	3
Mt. Desert, Me.	E. T. Wherry	5
Talland, Colo.	D. Demere	10
Michigan	Geo. E. Nichols	3
Maine	Mrs. W. H. Peckham & Mrs. L. W. Hitchcock	52
Mt. Pleasant, S. Car.	D. Auld	14
Windson, Colo.	Geo. E. Osterhault	5
Bear Fort Mts.	J. E. Alexander	2
Bear Fort Mts.	J. E. Alexander & A. H. Ross	6
San Francisco, Cal.	Alice Eastwood	5
N. Mexico	E. McE. Slater	26
California	Philip Muntz	36
California	Dr. D. T. MacDougal	48
California	H. M. Hall	7
Oregon	J. E. Kirkwood	14
Clinton, N. Y.	A. P. Saunders	2
Iowa	L. H. Pammel	12
California	Mrs. Grace S. Dyer	32
California	Carl Purdy	72

Respectfully submitted,

ETHEL ANSON S. PECKHAM.

DWARF BEARDED IRISES WANTED

We have been fortunate in securing the active interest of Prof. Albert Haven Wright at Cornell University, Ithaca, N. Y., who wishes to make a comprehensive and intensive study of Dwarf Bearded Irises. Members who can contribute any of the following varieties or any of the most recent introductions are requested to write direct to Prof. Wright.

This group as represented in the New York planting has been the special interest of Mrs. L. W. Hitchcock, of New Rochelle, and

she has done much in the classification of the many varieties, but the nomenclature is most confused and further work is needed before an authoritative bulletin on the subject can be prepared.

Adelaide
Albida
Albo-virens
Aequiloba
Aureole?
Aladdin
Amaltrae
Andrassy, Count
Anais
Attica
Alba nana
Attraction
Alphonse

Beauty
Bobs
Bouvet, Le
Beatrice
Bartoni
Biflora atropurpurea
Burgos
Border
Burgundy

Canari
Chancellor
Clothilde
Crepuscle
Carl
Celia
Chamaeiris Naomi

Caelestis

David
Dragon

Ernest
Evelyn

Flavissima (arenaria)

Goldfinch
Grisea
Grandesse, La

Horace Vernet

Jock

Kovel

Leander
Leopold
Lutea maculata

Magpie
Melpomene
Mecene

Nellie
Nimrod

Osiris
Oriel

Prairie Queen
Placid
Penelope
Pumila bicolor
Princess Ida

Regatta
Rosalie

Sabrina
Siam
Syria
Santiago
Sapphire
Sidonie
Seraphim
Sulphurea grandiflora
Stenoloba

Uranus

Vestal
Virescens
Voltaire
Violacea superba

BROOKLYN BOTANIC GARDEN

Report on Japanese Irises

DR. GEORGE M. REED

We had a very good season for the Japanese Irises at the Garden, the weather during the entire month of July was most favorable and some varieties continued blooming into early August. In my visits to commercial plantings, I found some in poor condition due perhaps to the dry backward spring, although the characteristic root rot disease was present.

Miss Purdy made seventeen colored illustrations during the season including certain Siberians and species as well as the Japanese. I have a lot of seedlings, many of known parentage

planted out and provision has been made for new experimental beds with the hope that we can get further light on cultural conditions. The loss of plants has been much less than in previous years.

Many descriptions have been made and I attempted to work out a color classification but found it difficult to find dividing lines between different varieties. After I had the collection fairly well arranged I would go out and bring in another variety which would fill the gap and the whole arrangement would have to be started all over again. I had lots of fun doing it but the results are far from ready for publication.

The most important thing that I learned was that we needed more time before we could be ready for publication.

Note: Members who attend the Annual Meeting will have a splendid opportunity to appreciate the extent of the work that Dr. Reed is carrying on with the full cooperation of Dr. Gager and the staff of the Brooklyn Botanic Garden. As you may remember, our plan embraces the publication of a Monograph on the subject comparable in format to "The Genus Iris." Such an undertaking is a matter of time and study in the first place and of wise expenditure in the second. Even as but one of the sponsors the society is assuming large responsibilities and will need the hearty cooperation of every member.—Ed.

Report of the American Iris Society Display Garden on the Library Grounds, New Rochelle, N. Y., 1926

There has not been much change in the Iris Display Garden at New Rochelle this year. We took out a number of plants of unattractive varieties that were on the edge of the shrubbery border and replanted with divisions of better sorts from the display beds. We divided some clumps that were too crowded. About a dozen varieties were added. These were received from Mr. Wister and Mrs. Peckham. The surplus was sent to Larchmont (32 varieties), to Stonington (70 varieties), and to Cincinnati (67 varieties) and the rest we gave to the New Rochelle Park Department to replace irises that they had which were of very bad varieties and which we persuaded them to discard. During the height of the blooming season a plant sale was held on the Library Grounds by

the local Garden Club and tea was served by the A. I. S. Group of New Rochelle. There were many visitors who asked questions about the irises and who took notes of names, etc., and we are convinced that affairs of this sort spread the interest in irises. The Garden Club contributed twenty-five dollars towards these grounds this year, some of which was used for winter covering and labels and some of which will be available for next year.

Respectfully submitted,

ETHEL ANSON S. PECKHAM.

LIST OF IRIS AT MISSOURI BOTANICAL GARDEN

DECEMBER, 1926

The following list of varieties at the Missouri Botanical Garden is published in order that members may contribute such additional varieties as may be available. Please notify Dr. George V. Moore, Director, Missouri Botanical Garden, St. Louis, Mo., of available varieties as soon as possible.

The development of this planting as an Official Trial Garden of The American Iris Society is to parallel the work already begun at the New York Botanical Garden and thus to offer growers in the central district a check planting of named varieties and an opportunity to test out new varieties for official recognition. The plan calls for the most extensive planting in the middle west; Dr. Moore offers most cordial cooperation; every member of the society is urged to aid in its success.

December, 1926

Acquackanonk
Admiral Togo
A. E. Kunderd
Afterglow
Agnes
Albatross
Albert Victor
Albicans
Alcazar
Aletha
Alfred Fiddler
Alice Barr
Alice H. Bayne
Alice Osgood
Alvares
A. M. Brand
Amabilis
Amas
Ambassadeur
Ambigu
Ann Page
Anna Farr
Anna Jane
Anne Leslie
Apollon
Archeveque
Argonaut
Argus
Argynnis
Ariadne
Arlequin Malinais
Arlington
Armand Clavaud
Armenien
Arnols
Arsace
Assuerus
Assyrian
Astarte
Athene
Atlas
Atrocoerulea
Attraction
Aunt Rachel
Aurea
Aurora
Austin
Australis

Autocrat
Avenir
Avice
A. W. Blakely
Aymard
Azure
Azure Glow
Azurea

Balaruc
Ballerine
Barbara
Baronet
Barrelane
Barton Harrington
Bashi Bazouk
Beatrice
Beauregard
Beauty
Beethoven
Belcolor
Belladonna
Benbow
Berchta
Bergi
Bianca
Bigotoni
Black Prince
Bluebeard
Bluebird
Blue Boy
Blue Jay
Blue King, Sib.
Blue Lagoon
Bluestone
Bluet
Boccage
Boismilon
Bosniamae
Bosset
Bougere
Bouquet
Bouquet Royal
Boyer
Brabant
Brachycuspis
Brandywine
Bride
Bridesmaid
Brionensis
Bronze Age
Bronze Beauty
Bronze Lady
Brooklyn
Brunotte
Buriensis Elizabeth
Butterfly
B. Y. Morrison

Calypso
Cameleon
Camelot
Candelabre
Candida
Canopus
C. A. Pfeiffer
Caprice
Carcanet
Carolyn D.
Carthusian
Catalosa
Caterina
Cavalier
C. D. Hayes
Cecil Minturn
Celeste
Celia
Cengialti
Cengialti purpurea
Chalcedonica
Chamaeiris
Charles Dickens
Charmant
Charmer
Chenedolle
Cherubin
Chester J. Hunt
Chicoree
Circe
Clara Curtis
Clarence Wedge
Clarissa
Clio
Cluny
Col. Candelot
Como
Commodore
Conqueror
Conquistador
Contrast
Cora
Cordon Bleu
Cordelia
Cornuault
Corrida
Cottage Maid
C. P. Connell
Cretan
Cretonne
Crimson King
Cristata
Crusader
Cyanea
Cytheree

Daisy Hill
Dalila
Dalmarius
Dalmatica
Damozel
Dandy
Daniel Lesueur
Daphne
Darius
Darling
Dauphin
Dawn
Dejazet
Delagrange
Delicata
Delicatissima
Demi Deuil
Demure
Diadem
Diamond
Dianto
Dichotoma
Dilkush
Dimity
Dolores
Dolphin
Dominion
Donna Maria
Dorak
Dora Longdon
Dorman
Dorothea
Dorothea K. Williamson
Dr. Andrist
Dr. Bernice
Dr. Logan
Dr. Lyons
Dr. Manton
Dr. Vincent
Drake
Dream
Dreamlight
Du Bois de Milan
Duc de Belcourt
Duchess of Wellington
Du Guesclin
Duke of York
Duquesne
Durieu
Dusky Maid
Dusky Prince

Eckesachs
Eclaireur
Eclipse
Eden Phillpotts
Edina
Edouard Michel
E. H. Jenkins
Elberon
E. L. Crandal
Eldorado
Elinor
Emir
Emma

Empire
Empress
Empress of India
Ena Brallior
Enchantress
Erich
Esmeralda
Esperance
Etta
Eugene Bonvallet
Eugene Sue
Exquisite

Fairy
Fantasy
Fatide
Faustine
Favourite
Fenella
Fenton
Firmament
Flammenschwert
Flavalba
Flavescens
Florence Wells
Florentina
Fontarabie
Foster's Yellow
Francis Bennett
Franklyn Benyon
Frank M. Thomas
Freckles
Frederick
Fritjof
Fro
Fryers Glory
Fuerstin Lonyay
Fulva

Gaiete
Gajus
Gamaliel
Ganymede
Gedeon
Genghis Khan
Genoa
Georgia
Geraldine
Gerda
Germanica
Germanica alba
Gertrude
Gisele
Gladstone
Glee
Glitter
Glory of Hillegom
Glory of Reading
Gnome
Gold Coin
Gold Crest
Golden Plume
Goldweir
Goliath
Gorgeous
Gov. Hughes
Grace Alexander
Grace Kimball
Gracilis
Grand Bouquet
Grandee
Grandeur
Gray Morn
Greater May Queen
Grenville
Grevin
Grey Friar
Guinevere
Gules
G. W. Peake
Gypsy Queen

Hakador
Halfdan
Halo
Hamadan
Hannibal
Harlequin
Harpalion
Harriet
Harriet Presby
Harris
Harrison Weir
Hautefeuille
Hebe
Hector
Helene Koehler
Helge
Helvetia
Henri Glower
Herant
Hereward
Her Majesty
Hermione
Herocles
Hiawatha
Hilda
Hippolyta
Honorabile
Hopateong
Hope
Hugo

Idion
Ignacite
Igouf
Ilsan
Imperator
Inca
Indian Queen
Ingeborg
Inner Glow
Innocenza
Int. Cuxosa
Iris King
Iroquois
Ismali
Isola
Isoline
Istrea
Ivanhoe
Ivorine
Ivy Logan
Izora

Jacinto
Jacqueline
Jacqueline Guillot
Jacquesiana
Jacquinetta
James Boyd
Japanesque
J. B. Dumas
Jean Chevreau
Jeanne d'Arc
Jennett Dean
Jesse McInnes
John Bull
John Foster
John Fraser
Joie de l'Oeil
Joice Resbury
Josephine
Joya
Jungfrau
Juniata
Junon
Junonia
Jussien

Karen
Kashmir White
Kathleen
Kathryn Fryer
Katrinka
Kempi
Kharput
Khedive
King Christian
King George
King Humbert
Knysna
Kochi
Koya
Kurdistan

La Beaute
Lady Chas. Allom
Lady Foster
Lady Grey

Lady Holland
Lady Jellicoe
Lady Lilford
Lady Seymour
Lady Stanhope
Lance
Lancelot
La Neige
Le Reve
Laurentinus
La Vallette
Lavandulacea
Lavater
Leander
Leda
Lent A. Williamson
Leone Trenance
Leonidas
Le Pactole
Le Perle
Leseble
Leverrier
Lewis Trowbridge
Leyland Huckfield
Lionel Millet
Lizzie
Lohengrin
Loppio
Lord Grey
Lord of June
Lord Salisbury
Loreley
Louis Van Houtte
Loute
Lowell
Lucy
Lugarda
Lurline

Madison Cooper
Mady Carriere
Magnate
Magnifica
Maid Marian
Malvina
Ma Mie
Mandalay
Mandarin
Mandraliscae
Maori King
Marechal
Margaret Moor
Margery McCord
Margot
Maria
Marie Corelli
Marion Cran
Mariposa
Maritana
Marjolin
Marocain
Mars
Marsh Marigold
Mary Garden
Mary Grey
Mary Minanelle
Mary Orth
Mary Williamson
Massasoit
Mauvine
Maxime Cornu
May Morn
May Rose
Medallion
Medrano
Mercedes
Mercutio
Merlin
Meyerbeer
M. Hubert
Midas
Midwest
Mikado
Mildred Presby
Milky Way
Minnehaha
Minnesota
Minos
Mirage
Miralba
Miranda
Miss Eardley
Miss Rowe
Mist
Mistress Ford
Mithras
Mlle. Schwartz
M. Masse
Mme. Baze
Mme. Blanche Pion
Mme. Boullet
Mme. Chabal
Mme. Chereau
Mme. Cheri
Mme. Chobaut
Mme. Claude Monet
Mme. Denis
Mme. de Sevigne
Mme. de Stael
Mme. Guerville
Mme. Louesse
Mme. Thibault
Mme. Truffaut
Mme. Vernoux
Modest Guerin
Moliere
Monarque
Monhassan
Monsignor
Montezuma
Moonstone
Morphee
Mort Sanford
Morwell
Mother of Pearl
Mount Penn
Mozart
Mrs. Allan Gray
Mrs. A. M. Brand
Mrs. Andrist
Mrs. Barron
Mrs. Christman
Mrs. Cowley
Mrs. Curtis
Mrs. Dugdale
Mrs. Fryer
Mrs. G. Darwin
Mrs. Haw
Mrs. Horace Darwin
Mrs. J. S. Brand
Mrs. Lodge
Mrs. Neubronner
Mrs. Reuthe
Mrs. Riis
Mrs. Ryder
Mrs. Sanford
Mrs. Smith
Mrs. Tinley
Mrs. Walter Brewster
Mrs. Wedge
Mrs. W. R. Fryer
Murat
My Lady
Myth

Nancy Orne
National
Naushon
Navajo
Nazarin
Negas
Neglecta
Nellie Quinn
Nelly
Nelson
Nemours
Neptune
Nibelungen
Nicola
Nine Wells
Nirvana
Nokomis
Nothung
Nudicaulis
Nud. purpurea
Nuee d'Orage

Ochracea
Ochroleuca
Odaroloe

Odoratissima
Oliver Perthuis
Olivia
Onnoris
Opal
Opera
Ophelia
Oporto
Orangeman
Orange Queen
Orchid
Oriental
Oriflamme
Orpheus
Osceola
Ossian
Othello

Pacquinto
Pacquita
Palaurea
Palissy
Palladin
Pameron
Pancroft
Pandora
Pantheon
Papillon
Paragon
Parc de Neuilly
Parisiana
Parkmani
Parsam
Pastel
Patience
Patrician
Paulina
Pauline
Paxatawny
Penelope
Penge
Pensamiento
Perfecta
Perfection
Perle
Perry's Favorite
Peter Barr
Petit Vitry
Petite Amie
Petrel
Pfauenauge
Pharaon
Phidias
Phyllis Bliss
Pink Pearl
Pioneer
Plicata Sappho
Plumeri
Pocahontas
Poiteau
Polaris
Pont-a-Mousson
Powhatan
President Thiers
Prestige
Primier
Prince Charming
Prince Lohengrin
Prince of Orange
Prince Victor
Princess Beatrice
Princess Louise
Princess Osra
Princess Royal
Princess Toto
Princess Victoria Louise
Priscilla
Prof. Seeliger
Prosperity
Prosper Laugier
Prospero
Pseudacorus
Pseudacorus alba
Purple and Gold

Quaker Lady
Queen Alexandra
Queen Caterina
Queen Elinor
Queen Flavia
Queen Mary (Perry)
Queen of May
Queen of the Dale
Queen Victoria

Rachel Fox
Racine
Radiance
Raffet
Rajput
Rakan
Rangoon
Raphael
R. C. Rose
Rebecca
Red Cloud
Red Cross
Red Glory
Red Riding Hood
Regan
Reggie
Regina
Reine des Belges
Rembrandt
Reticulata purpurea
Reverie
Rev. S. H. Smith
Rev. Wurtelle
Rhein Nixe
Rheintraube
Rhoda
Rialgar
Ricardi Fence
Richard II
Ri-Kochi
Ring Dove
Riva
Rodney
Rollandinna
Romany
Romeo
Rosalba
Rosalind
Rosamond
Rosedale
Rose Unique
Roseway
Rosine
Royal
Royal Purple
R. R. Smith
Ruberrima
Rubyd
Ruby Queen
Rugajo
Ruth Rand

Safrano
Salonique
Sambucina
Samson
San Gabriel
Sans Souci
Sarabande
Sarah
Sarpedon
Saturn
Saul
Savignian
Scala
Schneekuppe
Schwanhild
Seagull
Seminole
Shalimar
Shekinah
Shelford Yellow
Sherbert
Sherwin-Wright
Shirin
Shotsham
Shrewsbury
Silver Mist
Silvia
Simplicity
Sincerity
Sindjkha
Sioux Maiden
Sky Blue
Snow Queen, Sib.

Socrates
Solana
Soledad
Souv. Eugene Verdier
Souv. Loetitia Michaud
Souv. Mme. Gaudichau
Sparta
Speciosa
Speedwell
Splendour
Spuria
Stamboul
Standard
Standard Bearer
Stanley
Stanley White
Statellae
Steepway
Stewart
Sudan
Sunshine
Susan Bliss
Suzanne Autissier
Swatara
Sweet Lavender
Swerti
Sylphide
Sylvester
Sympathy
Syphax

Taffeta
Taj Mahal
Tamar
Tamerlan
Tarquin
Tartarin
Tectorum
Tecumseh
Tendresse
Texas
Thelma Perry
Theresita
Thora
Thorbeck
Tineae
Tintallion
Titan
Titus
Tom Tit
Topaz
Toreador
Trautlieb
Tregastel
Trianon
Trinidad
Tristram
Troguers
Trojan
Trojana
Tromagnifica
Troost
Trosuperba
True Charm
Turco
Turquoise
Twin Larches

Ulysses
Undine
Ungarica
Unique

Valery Mayet
Valkyrie
Van Geerti
Variegata (Hungary)
Variegata Minor
Venus
Venusta
Verbena
Verdun
Victorine
Viel Or
Villereal
Vincentio
Viola
Violacea Grand.
Violet Queen
Violetta
Virgilia
Virginia Moore
Virgo Marie
Vondel

Wagner
Walhalla
Walneri
Walter Reuthe
Wanaque
Wawayanda
Weequahic
Western Dream
W. F. Christman
Whiffenpoof
Whim
White Knight
White Nymph
White Queen
Wigan
Willie Barr
Willoughby
Windham
W. J. Fryer
Wm. Marshall
Wm. Wallace
Wyomissing

Yellow Hammer
Yellow Moon
Yeoman
Yountakah
Yvonne Pelletier

Zanardelle
Zephyr
Zouave
Zua
Zwanenburg

IRIS SUSIANA.* (The Mourning Iris)

FREDERICK BAUER
(Translated by B. Y. Morrison)

Iris susiana has been known in Europe since 1573 when its roots were first brought to Holland from its Asiatic home and in the passing of the centuries they have appeared again and again among the garden materials exported from their native land, if only to be retailed. Yet this distinguished and strangely interesting flower seems never to have been acclimated with us. Its great sensitiveness to our climatic conditions always hindered its plentiful occurrence, for, except with special culture its roots will always die out and only through rhizomes imported from Holland could we become acquainted with a flower, whose extraordinary beauty has been praised repeatedly in countless books, but which, in spite of all, must be considered to-day as a little known stranger.

A large importation of well-grown buds (blooms) from Holland or southern countries at the beginning of this century brought this remarkable flower into the show windows of the large city florists for several weeks, yet even then, for reasons to be discussed later, the *susiana iris* can hardly be said to have received its merited admiration. There had also been some dissemination of this importation even before the war.

When, after many years of occasional endeavor, after numberless failures and half successes I lived to see this wonder-iris a single time in its full beauty, then rose in my innermost soul a solemn feeling of awe before this supreme example of nature's manifestation and I lived in joy and thankfulness for the most beautiful day which my, at that time, small garden had ever offered me in the spring. For, at that time I first discovered what was hidden in this often read and often heard name, *Iris susiana*, and that is something that only a special gift of imagination can conjure. Indeed its size exceeded the size that I had previously considered any way possible. The character of the form occurred in the most sharply defined clarity and the upper margins of the standards showed me for the first time the great breadth of their full development through the linear, not narrowed, direction of the

* From Gartenschönheit, Vol. 7, No. 5, pp. 122. May, 1926.

spreading net-work of veins. In the opening of cut buds apparently the development of the margins remained incomplete. At the same time the conspicuous circular formation of the petals showed most clearly.

The ideal, beautiful, even, sunny spring weather which makes for the beauty of the flower (the sun's warmth is very valuable) also prevents other injury to its delicate texture and extends its span of life to a full five days, though others of the oncocyclus tribe last but four days.

I realize also with all clearness that in their special distinction from the germanica types they might be compared in carriage to a half-opened tulip, because the standards (not those called "dom," however) fold about one another in bell-like fashion while the strongly bearded falls protect the scented standards.

Her sisters, *I. Sari var. nazarena* (or *I. bismarckiana*) and *I. iberica,* in spite of their many similarities in picture, are yet very different both in marking and in coloring and above all are there great differences in the size of the petals. Their distinction does not lie in the petals as does that of *I. susiana.*

But the imposing structure of the flower and the network of veins which completely covers it is not the only feature for which the flower is notable. The splendid and unusually strongly developed petal-like pistil and the large crests make the harmony complete. Indeed in this case the open chalice form so often considered an undesirable feature proves, in fact, desirable since the beautiful three-parted gynecium both in itself and in conjunction with the delicately folded and plaited petals can then properly develop (if the "dome" were closed one could enjoy little or nothing of the shape and coloring of the inner parts).

The last and perhaps the most important consideration in the endless consideration of its beauty lies, however, in the little appreciated but extreme transparency of the delicate segments. Whoever considers this plant hastily and superficially against a dark background in a failing light would think it almost colorless, as blue-gray or black. Just to-day the comment of a child rings in my ears as I heard it as I stood before a vase of *I. susiana* at a florist's at Frankfurt-am-Main, "Ah—, Mamma, what a dirty black flower!" The transparency reveals also another, not unimportant point. It emphasizes the detail that the beautiful venation is complete only upon the upper part of the standards, while elsewhere it

is made up of two entirely distinct, superimposed markings by which the richness and charm of its characteristic beauty are enhanced.

IRIS OF THE REGELIA AND ONCOCYCLUS GROUPS*

E. NUSSBAUMER

(Translated by B. Y. Morrison)

Of the showy iris species the members of the Oncocyclus and Regelia sections are seldom found in our gardens, for while they are not much like other members of the genus, they surpass the others in their markings, beauty of color and even in size of flower. In any event they may be recommended to the lover of beautiful flowers, for the extra care in cultivation required as compared to that demanded by the Pogoniris and Apogons will be richly repaid by the pleasure of seeing such beauty as they will produce. Everyone who has seen *susiana, bismarckiana, paradoxa, korolkowi, hoogiana,* and their hybrids (Reglio-cyclus) is astonished and transported by these masterpieces of nature.

The Oncocyclus irises differ from the Pogoniris and the other groups in their short rhizomes, relatively narrow gray-green leaves, one-headed and one-flowered stalk. The flower is usually very large and of beautiful compact form. The falls are thickly covered with hairs over the central portion and haft. The tawny or brownish red seeds have an aril which is often as large as the seed itself.

The Regelia irises are almost identical with the Oncocyclus in rhizome, leaf, and seed, but the flowers are more slender and the stalk carries two and often three blooms and the bearding of the falls is limited to a narrow line from the middle to the base of the fall. Another, more horticultural difference, is, as W. R. Dykes says in "The Genus Iris," that the Regelia irises are more easily and safely cultivated than the Oncocyclus. The Regelias are natives of Turkestan and Armenia, the Oncocyclus come mostly from Asia Minor, Palestine, Syria, the Caucasus and Persia. Their origin in this dry warm clime should be considered in their cultivation. Otherwise the attempt will end only in misfortune. In order to secure free-flowering, therefore, care must be used to ripen

* From Gartenschönheit, Vol. 7, No. 5. May, 1926.

the rhizome thoroughly and to bring the plant into the winter with very little leaf growth.

In our climate the best planting time is from the middle of October to the middle of November. The rhizomes should be planted in a warm protected site in rich (not freshly manured), if possible limed, very well-drained soil, with the tips of the rhizomes not more than two to two and three quarter inches below the surface. A light dry mulch is desirable in our changeable winter weather. The leaves are not damaged by late frosts, as here plants eight to ten inches high have endured frosts to 11 degrees centigrade without protection. After flowering but not before the middle of July the plants should be lifted and stored until planting time in a warm dry place. By too early lifting the rhizomes and roots are shriveled which hinders flowering.

If one desires a permanent planting, the plants, growing in well-prepared beds enriched with fine mortar rubble, must be covered with sash shortly after flowering. The sash should be raised about two feet above the soil so that there may be free air passage at the sides and must remain in place until October. By such protection from rain the rhizomes are completely ripened and do not push into growth too early. Bone meal well mixed with the soil before planting is the best fertilizer.

These directions serve equally well for the Regelias, *korolkowi, hoogiana,* and *stolonifera*; all of which under good care will flower as freely as *I. germanica.* But in the successful cultivation of the better oncocyclus irises there is always an element of luck, for the plants die out after several years and must be reimported from southern Europe. Van Tubergen, of Haarlem, has produced, by crossing the oncocyclus and regelia irises, a hardier race. These are the Reglio-cyclus iris which require similar care to that given *I. korolkowi* and whose blooms are intermediate between the parents showing a wonderful play of color. The ground color of the perianth segments goes from white or ivory to bright violet, purple, or chocolate brown. On this is spread a network of darker veins and spots. The signal spot on the fall is usually dark violet or blackish brown. An almost as dark a color shows on the upper side of the sharply keeled style-branches which in such varieties as Ismene and Corinna glow like copper, while a warm red shimmers in the sunlight in the brownish black or dark violet falls of Clotho. The style-branches usually show the same color as the falls.

The following are some of the more important forms and species of these groups:

Oncocyclus

I. susiana, the familiar Mourning Widow, has been in cultivation since 1753 and is typical of the section. The flowers have a diameter of more than four and a half inches. The ground color is grayish blue with bluish black veins and spots; the bearded signal on the falls black. It is the easiest of the section to grow.

I. bismarckiana with equally large flowers has a straw yellow ground, thickly covered with dark brownish red veins and dots, signal blackish brown, standards bluish violet with dark or brownish violet veins.

I. lorteti is large flowered, the falls light gray lilac thickly covered with fine red brown dots and veins, the signal dotted dark brown, the standards light rose netted with reddish brown.

I. gatesi, with the largest flowers of all, is of a satiny ivory white flushed with rose and veined and dotted with a delicate silver gray.

Regelia

I. korolkowi, a typical species, was first brought into cultivation in 1870. The flowers are milk white with blue gray or red brown veins, the coloring very variable as the designation of the varieties shows—*atropurpurea, concolor, leichtliniana, venosa, violacea.*

I. hoogiana has been recently introduced by Van Tubergen and is an easy, free-flowering species. (Illustrated in Vol. 11, p. 103.) It is a self-colored light lavender blue without marking and has a delicious fragrance.

Reglio-cyclus

Artemis (*I. korolkowi violacea* × *I. mariae*). Violet purple, veined darker and with a darker signal; long stemmed and very free-flowering.

Charon (*I. korolkowi venosa* × *I. atropurpurea*). Bronze to mahogany in effect; brown over old gold, with brown veins.

Clotho (*I. paradoxa* × –). Falls velvety dark brown violet with a very dark signal, standards dark blue with almost black veins.

Clytemnestra (*I. korolkowi atropurpurea* × *I. paradoxa*). Falls whitish, washed violet gray; signal velvety black violet; standards pure violet with darker veins; free-flowering.

Corinna (*I. korolkowi violacea* × *I. urmiensis*). Very large; falls smooth ivory heavily veined and dotted red brown; signal velvety black in a yellowish zone; standards lilac white, flecked and veined with purple. Unfortunately the shape of the flower is not free from fault as the standards stand too far apart and, in maturity, the falls are too revolute and clasping.

Irma is a pearl white self with violet veins and dark violet dots.

Ismene (*I. korolkowi typica* × *I. iberica var. houttei*). Smooth ivory colored falls with purple brown veins and dark brown signal; standards bluish white, veined purple.

Luna has especially large, well-formed flowers delicately veined on white.

Turkoman (*I. stolonifera* × *I. korolkowi*). Not a true reglio-cyclus but with a brilliant blue beard on a reddish mallow colored ground.

Illustrations of *I. iberica, bismarckiana, susiana,* Ismene, and Irma. Color plates of Artemis and Bancis.

EVERBLOOMING IRISES

M. Denis, France

(Translated by S. B. Mitchell)

Are there any everblooming irises in the Pogoniris group, otherwise called Germanicas?

An everblooming iris is by definition one which is capable of flowering regularly twice a year; the first time in spring, the second time in autumn or in winter. There have been none to date. Iris Germanica, variety Nepalensis, (syn. Germanica Atropurpurea) often flowers a second time in the south between November and March, but not regularly. Certain Variegatas, for example Gracchus, bloom a second time, but only occasionally. Within the last few years the firm of Vilmorin has sent out the variety Alliés, describing it as everblooming. I have been growing it in my garden for almost ten years, thanks to the kindness of the originators; it has often given a second blooming, but never regularly. Therefore it cannot be classed as everblooming. Phryné, one of the recent novelties of Monsieur Cayeux, has for two years in succession flowered in February and March and again in May, but this is peculiar to the climate of Tamaris; at the originator's it only flowers once.

Finally, in 1926, Monsieur Charles André, horticulturist at Varennes sur Allier, Allier, sent out two irises of the Pumila group, Jean Siret and Souvenir du Lieutenant de Chavagnac, which, when shown at the Societé Nationale d'Horticulture de Paris the 25th of November last, received a certificate of merit as being actually everblooming. I am growing six plants; they have been constantly in flower from November to the end of February. Most of the Iris pumila of commerce are not real Pumilas but forms of I. chamaeiris; this is the case with the two new irises. The flowers are of medium size, as are the stems. This is just a first stage. How shall we get better ones? We may try to cross them with I. Germanica Nepalensis, but success is doubtful, inasmuch as the pollen is nearly

always sterile. It would be more hopeful to use held-over pollen taken from late varieties. Pollen collected in the middle of the day during a dry spell and placed in a tube previously heated so as to drive off all moisture will keep its fertility for quite a long time. For hothouse orchids, I have used pollen thus kept for four months and have had good results. My experiments on iris, made after six weeks, have had a fair measure of success, but I have not gone any further as yet. These everblooming Pumilas, crossed with Germanicas, will probably give a certain proportion of everblooming seedlings, which must then be crossed again with Germanicas to get large flowers. It will take about six years to achieve, but the hoped-for result would be most interesting.

TAMARIS, FEBRUARY 28, 1927.

AMERICAN IRIS SOCIETY BULLETINS

Each year some hundreds of previously issued bulletins have been sold to members and with the exception of Nos. 1, 3, and 18 which are now available only in a complete set of our publications, copies of the Bulletins may be obtained. In many cases, however, our supply is low and members are advised to send in their orders at once to the Science Press Printing Co., Lancaster, Pa. Checks payable to The American Iris Society.

Bulletins 10, Irises for Beginner, and 11, Beardless Irises, should make most acceptable gifts to garden friends as they are complete guides in themselves. Nos. 16 and 21 are especially recommended for schools, colleges, and technical libraries as well as to all plant breeders. With these exceptions the bulletins have been planned to contain articles of interest to the amateur and the professional, the beginner and the advanced student alike. The field of iris literature is not large and the publications of the Society comprise a surprisingly large share of what has proved of value and interest to the lay gardener. Original articles written by leaders in iris thought, reprints from rare old editions, and translations from foreign publications all serve to make our bulletins of real value.

The following brief abstracts of contents should prove a helpful guide:

No. 1. *The Culture of Irises in the United States. 32 pp.*
Adventures with American Irises. Louise Beebe Wilder. Cultural notes for Massachusetts, Illinois, Minnesota, Colorado, California, and the Pacific Coast.

For sale in complete sets only.

No. 2. *Garden Irises Past and Present. 44 pp.*
The Development of Tall Bearded Irises in the 19th Century. Ernest H. Krelage.
Sir Michael Foster and his Irises. Sir Arthur Hort. Registrations and notes on hybridization and garden effects.

No. 3. *Sir Michael Foster. 32 pp. Illustrated.*
The modern iris owes its development to Sir Michael Foster—his varieties still grace our gardens, his influence is seen in the later work of W. J. Caparne on the Intermediate Iris, and of W. R. Dykes in "The Genus Iris."

For sale in complete sets only.

No. 4. *Check List* (superseded by No. 8). Free on application.

No. 5. *Symposium. 32 pp.*
Numerical ratings of some 700 varieties which, with supplements in No. 10, are a most valuable guide to the relative value of standard varieties.

No. 6. *Descriptions of Varieties, Part I. 40 pp.*
Notes on European Irises; 100 descriptions (see also Nos. 7, 9, and 12).

No. 7. *Descriptions of Varieties, Part II. 40 pp.*
Articles by A. J. Bliss, W. J. Caparne, and J. M. Shull.

No. 8. *Check List, October, 1923. 40 pp.*
This, together with a supplement and lists of registrations in Nos. 14, 18, and 22, gives the authoritative list of all iris names.

No. 9. *William Mohr. 46 pp. Ill.*
A detailed review of the bulbous irises and their culture. Descriptions, Part III.

No. 10. *Irises for the Beginner. 60 pp. Ill.*
A comprehensive treatment of all irises adapted to the small garden with recommended lists of varieties, garden, and cultural notes.
The Directors considered this bulletin worthy of a special edition and a copy has been given free to all new members. You may well advise your gardening friends to purchase it.

On sale to non-members at 50 cents.

No. 11. *Beardless Irises. 40 pp. Ill.*
A complete and compact review of the species and varieties of this group of the iris family. The articles by W. R. Dykes are of especial interest.

No. 12. *Notes and Descriptions, Part IV. 40 pp. Ill.*
This brings the list of descriptions up to about five hundred of the finest varieties.

No. 13. *A Classification of Bearded Irises. 36 pp.*
The first published color classification of the group and a valuable reference.

No. 14. *Bertrand H. Farr. 68 pp. Ill.*
The man and his work with irises. Official records of the Society 1920–1925 including the Code of Nomenclature, a 1924 Bibliography of Iris Literature, the White and Black lists of varieties.

No. 15. *Irises of the Future. 40 pp. Ill.*
Articles of Sydney B. Mitchell, B. Y. Morrison, Sherman Duffy, and others. Trial garden reports and records. The establishment of trial and display gardens has done much to popularize the iris.

No. 16. *A Report on Sterility in Irises. 44 pp. Ill.*
The first scientific study of the subject and the result of research at the New York Botanical Garden. The Iris Society has been the first popular flower society to initiate and support scientific research. The bulletin is not recommended to the casual reader.

No. 17. *Japanese Irises and Others. 44 pp. Ill.*
Prof. Miyazawa speaks of his iris work, M. Denis writes of White Irises, and others tell of their successes. It is an unusually chatty issue.

No. 18. *Records. 48 pp.*
M. Correvon adds interest to the reports of the year's work. 1925 Bibliography, Introductions, and Registrations.

No. 19. *W. R. Dykes. 40 pp. Ill.*
Dedicated to the memory of W. R. Dykes, a most interesting and permanent record of a life's work with irises. It includes the most valuable of his occasional writings. Further technical notes on sterility.

No. 20. *The Iris of Gerard's Herbal. 32 pp. Illustrated from the original.*
Irises in combination and on exhibit.

No. 21. *Planting an Iris Garden. 44 pp. Ill.*
Further studies in Sterility, Iris flavissima, and many odd notes from England and America.

No. 22. *Exhibition Policy. 60 pp. Ill.*
1926 records, bibliography and introduction. Further sterility studies.

This brief resumé suggests the scope of our publication but does not give full credit to the many authorities who have contributed to their success. From Holland M. Krelage has sent his historical treatise, from France have come notable contributions from Denis, Mottet, and others. England is largely represented by the writings of Sir Michael Foster, W. J. Caparne, W. R. Dykes, and many of the charter members of The Iris Society, R. W. Wallace, G. L. Pilkington, George Dillistone and A. J. Bliss, frequent contributors to The Garden, The Gardener's Chronicle, and the Re-

ports of the Royal Horticultural Society. While, as for America, hardly a popular writer on irises but is represented in our pages. Mrs. Wilder, the delightful writer on gardens and rock-gardens, heads the list, but Mr. Morrison's articles on Hemerocallis and irises are well-known. J. C. Wister, R. S. Sturtevant, Sherman Duffy, S. B. Mitchell (the author of Gardening in California), J. Marion Shull, S. Stillman Berry, write frequently for the gardening periodicals as well as for the Iris Society Bulletins. The Iris Society has been most fortunate and its bulletins deserve space not only on the reference shelf of a horticultural library but on that smaller shelf where favorite garden books find place.

TO READ OR NOT-TO-READ

As it happens a distinct contribution to iris literature, *The Iris,* by J. C. Wister, lends itself to the development of what I hope will become a permanent part of future Bulletins. Each of us has his own source of iris information, his own flow of incoming books and periodicals. To bring praiseworthy (or otherwise) abstracts or reviews thereof to fellow members would be a real kindness and I hope for many contributions to the July bulletin.—Ed.

The Iris. A Treatise on the History, Development, and Culture of the Iris. By JOHN C. WISTER. Orange Judd Publishing Co., New York. $1.25. Postage 10 cents additional.

This latest volume of the Farm and Garden Library, a series that includes The Gladiolus, by Prof. Beal, who was for so many years the Secretary of The Gladiolus Society, Balancing the Farm Output, by W. J. Spillman, and companion volumes on Roses, Dahlias, Spring Flowering Bulbs, etc., meets a distinct need of all who do not belong to our Society. And by this recommendation I neither intend to damn it with faint praise nor to flatter our members as being more intelligent than common. In fact, my intention is quite the contrary. Despite the fact that I have perused and edited Mr. Wister's reports and notes almost ad nauseum I find his latest contribution very much to the point and far and away the best introduction to the fascination of the iris that we have had.

The chapter headings "Consider the Lilies" and "Around the World with the Iris" immediately intrigue our attention and even a saturated reader of iris stuff will not be disappointed with the

text. The facts are not only comprehensively and clearly presented but odd phrases or comparisons are introduced here and there to start new trains of thought or to bring out new associations. "Iris albicans was carried—by men that we do not think of as garden lovers, the Mohammedan soldiers" or "Did they (cristata, gracilipes, tectorum) all come from a common ancestor?" are but two of many available quotations.

Of particular interest (and perhaps controversy) are the lists of recommended varieties, excellent selections on the whole though I squirm at the inclusion of certain names that I should place in a chamber of horrors. That the lists include representatives of all sections is a point to be noted and the classification by color and the extremely long Black List are worthy of study. The Calendar of Bloom is a new departure and though true it suggests far more than I, at least, have experienced.

Aside, however, from the many points of interest and value that are offered the tone of the book is markedly fine. It is like the man himself, strong in the friendly help it offers, sane in its advice, and above all most generous in the credit that it gives to the many breeders who have done their part in the development of the modern iris.

Mr. Wister, to whom the Society owes so much for his past work, has added greatly to our indebtedness by the writing of The Iris. It will be out of need for the book, not out of an appreciation of its author, that every member will add it to his library shelf.

I wish that I could write as highly of its format and general appearance. The illustrations are well selected but most poorly printed and the text has more than its fair share of printer's errors.

My Garden Comes of Age. By Julia H. Cummins. The Macmillan Co.

The development of a country place and garden pleasantly narrated and with seeds of wisdom sown rather at random. Of no special interest to the iris lover though irises have a place in the long borders and some of outstanding merit give special beauty to a bit of lilac hedged lawn.

Two Summers of Botanizing in Newfoundland. By M. L. Fernald.

This contribution from the Gray Herbarium of Harvard University merely mentions in passing "acre upon acre of the superb

blue-violet flowers of Iris setosa, var. canadensis'' but will prove quite fascinating to anyone interested in plant geography or to the many rock-gardeners who are beginning to find a place for American alpines. It is reprinted from *Rhodora,* Vol. 28, Nos. 328–336.

The Iris Society. Bulletin No. 4.

For the convenience of our members copies may be ordered from the Science Press Printing Co., Lancaster, Pa., at $1.00.

If you have read the previous bulletins your expectations of number 4 will be high and will not be disappointed. The articles on Easy Water Irises by R. E. S. Spender, and Iris laevigata by W. Christie-Miller are of interest, but your real attention will be centered on the detailed reports of varieties seen this last spring by P. J. Murrell and G. L. Pilkington. These field notes include, to be sure, comments on many varieties that we have buried but also many more comments on varieties so new that their names have hardly become familiar. If the notes were alphabetically arranged it would be a decided convenience but my interest decidedly overcame even this handicap. To find, however, that Gold Imperial, Chasseur, and Amber are considered so close that ''it is inconceivable that all three are needed as garden plants'' made me again wonder just how much iris color reacted in different climes and atmospheres.

National Horticultural Magazine. Vol. 5, No. 5.

The April issue of our new friend lists little of iris interest but as I know that a number of our members are also lilac collectors I wish to call their attention to the descriptive check list of iris varieties compiled by Mr. Wister. It may contain errors and mistakes, but it is by far the most complete and helpful article on lilacs that I have come across.

IRIS SHOWS, 1927

Albia, Iowa:	Albia Garden Club. Carrie Whitlock, Secretary.
Ashland, Virginia:	Miss Mary McD. Bierne. About May 20th.
Belvidere, Illinois:	Belvidere Iris Society,. Mrs. Sidney Veaco, President; Mrs. John Kuppler, Secretary.
Berkeley, California:	Spring Flower Show, April 23–24. Prof. Essig, 910 Hilldale Avenue.

COLUMBUS, OHIO:	Columbus Iris Society. Geo. R. Syfert, Secretary, 1541 Franklin Park S., Columbus, O.
FREEPORT, ILLINOIS:	The Freeport Garden Club. Mrs. W. L. Karcher, President, 1011 Stephenson Street.
GOODLAND, INDIANA:	The Goodland Garden Club. Mrs. C. A. Doland, Chairman.
HARRISBURG, PENNA.:	The Iris Club of Harrisburg. May 31st and June 1st. Mrs. J. E. Fox, Chairman, 223 North Front Street.
LEXINGTON, KENTUCKY:	Lexington Garden Club. Last week in May. Miss Daisy Hume, Chairman Iris Section, Winchester Road.
LYNCHBURG, VA.:	Miss J. Kinnier, Chairman, Washington St.
MINNEAPOLIS, MINN.:	T. A. Kenning, Chairman, 1815 26th Ave.
MONTCHANIN, DELAWARE:	Mrs. E. Paul DuPont, Chairman, Squirrel Run Hill.
NEW ROCHELLE, N. Y.:	Mrs. Wheeler H. Peckham, Davenport Neck.
OMAHA, NEBRASKA:	Omaha Garden Club, with the cooperation Midwestern Peony and Iris Society. Jacob Sass, Chairman, R. No. 6, Benson Station, Omaha, Nebr. May 27–28.
OSKALOOSA, IOWA:	Garden Department of the Oskaloosa Woman's Club. Mrs. C. C. Orvis, Chairman; Mrs. Lyman H. Brown, Secretary, 1120 9th Avenue, W. Oskaloosa, Iowa.
REDLANDS, CALIFORNIA:	Dr. Berry, Iris Division, 1145 W. Highland Ave., Redlands, California.
RICHMOND, VIRGINIA:	The James River Garden Club. Mrs. T. A. Smyth, Chairman, 2336 Monument Ave., Secretary. May 12th and 13th, Auditorium of the Woman's Club.
ROCHELLE, ILLINOIS:	The Garden Club of Rochelle. Mrs. J. E. Barber, Secretary.
SEATTLE, WASH.:	No. End Flower Club.
SIOUX CITY, IOWA:	
WASHINGTON, D. C.:	National Capital Dahlia and Iris Society. May 24–25, Mayflower Hotel. E. W. Sheets, President, 1831 Lamont Street.
WILMINGTON, DELAWARE:	Mrs. Harlan G. Scott, 1320 West 14th Street.
BIRMINGHAM, ALA.:	*Plans Undecided*
CHATTANOOGA, TENN.:	

For full information, communicate with local chairmen.

Notice

For information concerning Display Gardens write Mrs. Brewster Hoornebeek, The Maples, Elgin, Ill. Details of the plan are given in No. 18, page 20.

For information concerning the use of lantern slides and syllabus write Mrs. S. B. Waters, Edgecliff Point, Walnut Hills, Cincinnati, Ohio.

Mrs. J. Edgar Hires, Ardmore, Pa., as Chairman of the Committee on Exhibitions, will henceforth handle all matters concerning local shows. Please notify her of your plans as soon as possible.

Charles E. F. Gersdorff, 1825 N. Capitol St., Washington, D. C., as Chairman of the Committee on Registrations, should receive all catalogs published and all registrations from breeders, including corrections to existing check lists.

Details of the $100.00 Prize offered by Robert Wayman will be found on page 40 of Bulletin No. 15.

Members from a distance who may be available for judging the 1923 and 1924 introductions at the N. Y. Botanical Trial Garden, about June 1st, are requested to notify the secretary.

Publications available from Science Press Printing Co., Lancaster, Pa. Checks payable to American Iris Society.

Bulletins of the A. I. S., Nos. 2, 5 (Symposium), 6, 7, 9 (Descriptions), 10 (Irises for the Beginner), 11, 12, 13 (Classification), 14, 15, 16 (Report on Sterility), 17, 18, 19, 20, 21, at $.50 each to members. Nos. 1, 2, 3, 4 and 8 (Check Lists) are practically out of print and available in complete sets only.

Bulletins of the Iris Society (English), No. 1, $.50; No. 2, $1.00; No. 3, $1.00; No. 4, $1.00.

Addisonia Vol. 9, No. 4. Eight Native Species illustrated, $2.00.

Les Iris Cultives. The Report of the International Conference at Paris, 1922, $1.00.

For the Cornell Extension Bulletin, No. 112, send to N. Y. State College of Agriculture, Ithaca, N. Y.

Membership List as of Dec. 31, 1925.

For Farmers Bulletin 1406 Garden Irises send $.10 to the Superintendent of Public Documents, Washington, D. C.

ANNUAL MEETING OF THE AMERICAN IRIS SOCIETY

The Annual Meeting of the American Iris Society will be held at the Brooklyn Botanic Garden on Friday, June 3. This date may be shifted earlier or later, depending upon the season. If change of date is made, due notice will be sent to all members.

To reach the Brooklyn Botanic Garden from the Pennsylvania Station, New York, take the Seventh Avenue Subway (Flatbush or New Lots Avenue Express) to Eastern Parkway and walk south about 300 yards on Washington Avenue. From Grand Central Station take Lexington Avenue Subway Express to Nevins Street,

Brooklyn, and there change to a Flatbush or New Lots Express to Eastern Parkway. Time from either station should be about 40 minutes. By automobile cross either Brooklyn or Williamsburg Bridge, take Flatbush Avenue to Eastern Parkway, then to Washington Avenue. If crossing by Queensboro Bridge, take Bedford Avenue to Eastern Parkway. Time about one hour from Grand Central.

The business meeting will be held at ten o'clock in the Laboratory Building. In addition to the transaction of the necessary routine business there will be detailed reports of the various activities of the Society, and special discussion of the Beardless Iris Project at the Brooklyn Botanic Garden. Miss Maud Purdy's water color paintings of the Japanese and other Beardless Irises will be on display.

In order to save time, since there are no nearby restaurants, all members should bring their own box luncheons, which will be eaten in the Laboratory Building following the business meeting. The time from 12:15 to 12:45 will be reserved for this.

After lunch there will be an inspection of the Botanic Garden Grounds, the chief points of interest being the Japanese Garden, the Rock Garden, the Iris Plantation, especially the experimental beds of Japanese and other Beardless varieties.

Afternoon Visits to Gardens

Following this inspection, at 2 P. M. the members will proceed by automobile to the garden of Mr. Robert Wayman, Bayside, Long Island, where they will be able to study one of the largest collections of the newer varieties of Bearded Irises in the East. It is expected that many of the rarest European novelties will be in bloom. At 3:30 the party will proceed to the garden of Mr. and Mrs. T. A. Havemeyer, at Brookville, where the visitors will be guests at tea. The visitors will have the privilege of seeing the many rare plants for which Mr. Havemeyer's nursery is famous, as well as many fine varieties of Iris in large quantities.

At five o'clock the party will proceed to the estate of Mr. and Mrs. Harold Irving Pratt, at Glen Cove. Here great masses of Iris planted for color effect in the garden are to be seen, as well as the rose garden and other parts of this unusually lovely private estate.

Visitors may return to New York direct by train from Bayside if they do not wish to take the longer trip. Trains run frequently. Or they may leave the party after tea, returning from Glen Head station. Full information regarding time of trains for the return trip will be available at the meeting.

All those intending to go on the afternoon trip should fill out and return the enclosed card so that automobile reservations can be made. Cost of the automobile transportation will probably be about $1.25. It may be necessary for some of the party to return from Glen Cove by train.

For any further information address Dr. George M. Reed, Brooklyn Botanic Garden, Brooklyn, N. Y.

SPECIAL NOTICE TO MEMBERS

Owing to the protracted and fatal illness of our former treasurer there has been much confusion in the regular distribution of bulletins. All 1926 members should have received Nos. 18, 19, 20, and 21 very shortly after their respective publication dates. Any 1926 member who has not received all of these should immediately notify the secretary, Mr. J. B. Wallace, Jr., 129 Church St., New Haven, Conn., so that the missing copies may be sent.

Furthermore, through a mistake in the shipping office, so many members received two copies of No. 18 that our stock has been seriously depleted. The Society will appreciate the return of any extra copies. Please communicate with the secretary also if you wish to dispose of Nos. 1 or 3.

New Method of Iris Rating

shown in our 1927 descriptive list.
Sent on application.
Mrs. J. F. EMIGHOLZ
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Our **IRIS** list and prices will interest you. Large stock, low prices.

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To MEMBERS of the AMERICAN IRIS SOCIETY:

The ORPINGTON NURSERIES COMPANY cordially invite all American Iris enthusiasts who may be in England during May and June to visit the nurseries at Orpington and inspect the Irises when they are in flower. The plants are usually at their best towards the end of May and during the first ten days in June. The nurseries are only twelve miles from London.

The collection of Irises at Orpington is one of the finest in Europe, and the world's best varieties may be seen flowering together for comparison.

Those who cannot pay a visit will probably appreciate a copy of our book of the Orpington Irises, and this will gladly be sent post free on request to any address. Mr. P. Murrell, the well known Iris Expert, who is one of our Directors, is always glad to advise and assist growers who write to him in every possible manner.

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We are introducing eight exceptionally fine new Mohr Seedlings for 1927. Iris catalog will be ready in early spring. Our dahlia and gladiolus catalog is ready now. Free copy of either or both on request.
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IMPRESSARIO T. B. (Mor. 1923; Gers. 1927) Caterina x Alcazar. S. lobelia violet; F. livid purple to aconite violet to lobelia violet tips; large. Stock very limited. Reservations received; send no money. To be priced at $15.00 per single rhizome, maybe less. Reservations will be filled in rotation as received.
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COME OUT AND SEE THE IRIS IN BLOOM

MORE THAN 1000 VARIETIES—AND
NOT A POOR ONE IN THE LOT

Make your selections while they are flowering—Take them home with you if you wish.

I have one of the most complete and comprehensive collections of choice Bearded Iris in the world, including all of the 1925 and 1926 European introductions. You will in all probability find in bloom this season in my gardens just the varieties you were anxious to see.

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AMERICAN PEONY SOCIETY

Twenty-three years ago a small group of peony enthusiasts met and formed the American Peony Society for the purpose of increasing public interest in the peony and establishing a standard nomenclature. Bulletins have been issued during that period dealing with various phases of the peony such as culture, propagation and production of new varieties. Various exhibitions have been held annually and worthy prizes offered in numerous classes comprising the best to be found in the different types of peonies. This interest has increased from year to year and a steady growth of membership has been recorded. Medals are awarded each year in various sections of the country where local peony shows are held to encourage exhibitions of bloom and promote general interest.

At present annual dues are three dollars per year which includes all publications issued by the Society during the year. Back bulletins can be secured by members at a nominal sum. No formal application necessary. Anyone interested in flowers eligible. We heartily extend an invitation to join us in our work.

All remittances should be made to the order of the

AMERICAN PEONY SOCIETY

and sent to

W. F. CHRISTMAN, Secretary
Robbinsdale, Minn.

Officers 1927

President—John C. Wister, Clarkson and Wister Sts., Germantown, Philadelphia, Pa.

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PLANT—20%.

Growth exceedingly strong and vigorous.	10%
Effect in garden: free flowering, floriferous.	10%

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Poise: the flowers pleasingly proportioned in size and form to the height and branching of the stalk.	10%
Height: preferably over 40 in. in the taller groups, over 30 in. in the variegata, or amoena groups, 15 in. for intermediates, etc.	10%

FLOWER—35%.

Color: clear; venation or reticulation, if noticeable, clearly defined.	15%
Form: if distinctive and pleasing; e. g., Princess Beatrice, Queen Caterina.	10%
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OUTSTANDING QUALITY—Unless a variety is **both clearly distinct and pleasing**, it should receive no credit on this point. 15%

Distribution: Fragrance not over 5%; foliage thruout season not over 10%; value for exhibition or as a cut-flower not over 5%; exceptional development of form, color, or substance not over 5% each.

* From Bulletin 10, page 60.